

# AANSS2024 Program Overview

## Day 1 | Monday, 4 November

08:30	Registration Opens - AINSE Theatre		
09:30	Welcome Address, Acknowledgement of Country & Housekeeping		
<b>Session 1 - ANSTO Facility Updates   Karyn Wilde</b>			
10:00	Update from the Australian Centre for Neutron Scattering	Jamie Schulz	#53
10:30	Deuterium labelling at the National Deuteration Facility: Updates on Demand and Supply	Tamim Darwish	#56
11:00	Morning Tea		
<b>Session 2 - Magnetism and Condensed Matter   Kirrily Rule</b>			
11:20	Invited: Cycloidal spin textures in multiferroic BiFeO3 thin films probed by neutron diffraction	Daniel Sando	#19
11:50	The anisotropic magnetism of the cobalt-doped rare earth iron garnet Lu3Fe4Co0.5Si0.5O12	Siobhan Tobin	#5
12:10	Investigating the perturbation to the spin ordering of the helimagnet Cu2OSeO3 upon doping	Samuel Yick	#9
12:30	Dynamic realignment of the antiferromagnetic structure of exchange-biased CoFe /MnPt	Danica Solina	#16
12:50	Lunch		
<b>Session 3 - Magnetism and Condensed Matter   Dehong Yu</b>			
13:50	Plenary 1: Investigating quantum magnetism with neutron scattering	Bella Lake	#11
14:50	Spin wave excitations and two sublattice interactions of 153EuMn2Ge2	Richard Mole	#37
15:10	Magnetic fans, propellers and twist structures: Micromagnetic simulations to describe polarised neutron reflectometry data	Karen Livesey	#38
15:30	Afternoon Tea		
15:50	Recent polarised neutron experiments at ACNS	Andrew Manning	#46
16:10	Short Break		
16:15	Poster Slam   Chin-Wei Wang		
18:15 - 20:30	Poster/Networking Session in nandin		

## Day 2 | Tuesday, 5 November

<b>Session 4 - Manufacturing, Engineering &amp; Industry   Ania Paradowska</b>			
09:00	Invited: ANSTO's Neutrons for Industry	Helen Qiu	#4
09:30	Material Properties and Residual Stress Measurements in Additively Manufactured 316L stainless steel components	Markus Domogala	#33
09:50	Additive Friction Stir Deposition (AFSD) for High-Strength Aluminium Alloys	Vladislav Yakubov	#54
10:10	Morning Tea		
<b>Session 5 - Biological Systems and Soft Matter   Erica Wanless</b>			
10:30	Invited: Using (U)SANS to study protein structures in complex mixture	Leonie van t'Hag	#12
10:50	Water Dynamics in Australian Native Fruits as studied using Neutron Spectroscopy and Tomography	Paul Michalski	#17
11:10	Recent applications of neutron backscattering spectroscopy at ANSTO	Nicolas De Souza	#25
11:30	Specific Ion Effects on the Behaviour of a Pluronic Block Copolymer in the Bulk and at the Air/Water Interface	Grant Webber	#27
11:50	CLIC1 interaction with Model Membranes	Stephen Holt	#42
12:10	Lunch		
<b>Session 6 - ANBUG 2024 Award Presentations   Chris Wensrich</b>			
13:30	ANBUG Young Scientist Award		
13:50	ANBUG Neutron Award		
14:20	Afternoon Tea		
14:50	ANBUG Career Award		
15:50	ANBUG PhD Award		
16:10	ANBUG Annual General Meeting (AGM)		
17:20	Short Break		
17:30	Plenary 2: Residual stress measurement and mitigation engineering	Philip Withers	#24
18:30	Pre-dinner Drinks & Networking		
19:00	Dinner at ANSTO Cafe		

## Day 3 | Wednesday, 6 November

<b>Session 7   Chemistry and Crystallography - Helen Maynard Casely</b>			
09:00	Plenary 3: What a tame Platypus reveals about polymer brushes	Erica Wanless	#6
10:00	Structural instability in BiVO4 under compression	Brendan Kennedy	#1
10:20	Modelling diffuse magnetic scattering in a "partial spin-liquid" kagomé compound	Chris Ling	#21
10:40	Automated Analysis of Neutron Reflection Data from a Lithium-Mediated Nitrogen Reduction Reaction Using Bayesian Evidence	Callum Weir-Lavelle	#28
11:00	Morning Tea		
<b>Session 8   Neutron Instruments &amp; Techniques - Helen Qiu</b>			
11:20	Invited: ISIS Deuteration Facility	June Mc Corquodale	#18
11:50	Rediscovery of lost art in Reflectometry - using Maximum Entropy to study 'diffuse' systems	Andrew Nelson	#15
12:10	Recent Scientific Highlights and Developments on the Spatz Neutron Reflectometer	Anton Le Brun	#26
12:30	Awards Presentation	Andrew Peele	
12:45	Lunch		
13:40	A Decade of Successful Operation and Future Perspectives	Dehong Yu	#32
14:00	Neutron reflectometry for in operando characterisation of the solid electrolyte interphase (SEI) in electrochemical lithium-mediated nitrogen reduction reactions (Li-NRR)	Rebecca Hodgetts	#44
14:20	AINSE		Michelle Durant
14:45	Afternoon Tea		
<b>Session 9   Advanced functional materials &amp; devices/Earth Environment &amp; Cultural Heritage - Lu Jiang</b>			
15:00	Studying device processing steps with neutron reflectometry: Examples from quantum technology	David Cortie	#41
15:20	Cultural Heritage research using neutron methods at ACNS	Filomena Salvemini	#48
15:40	Neutron Imaging for Palaeontology	Joseph Bevitt	#55
16:00	Closing		